

SAE-AS27645

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(Project 3110-1089)

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AEROSPACE STANDARD

BEARING, BALL, AIRFRAME,
ANTI-FRICTION, SELF-ALIGNING,
LIGHT AND HEAVY DUTY

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SHEET 1 OF 3

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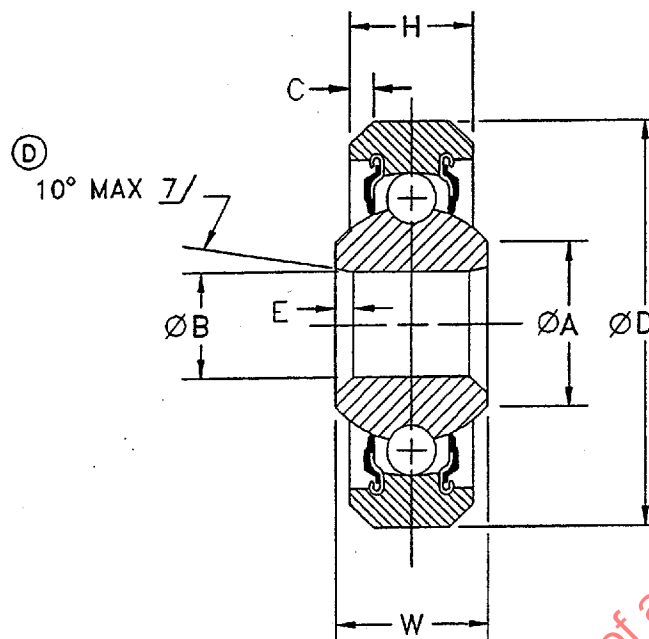


TABLE I. DIMENSIONS AND LOADS

MS DASH NO.	#B	#D	W	H	#A	E	C	RADIAL LIMIT LOAD RATING LBS	THRUST LIMIT LOAD RATING LBS	5/ RADIAL LOAD FOR AVERAGE LIFE OF 10,000 COMPLETE 90° CYCLES		AXIAL CLEARANCE (MAX)	WEIGHT POUNDS (APPROX)	MAXIMUM STARTING TORQUE (INCH-OZ)	MINIMUM TORQUE TO DISLODGE SEAL (IN-LB)
	2/ BORE	OUTSIDE DIAMETER	WIDTH INNER RING	WIDTH OUTER RING	SHOULDER DIAMETER INNER RING (APPROX)	4/ INNER RING CORNER CHAMFER	3/ OUTER RING CORNER CHAMFER			CASE I	CASE II				
	1/ 2/ RING	1/ 2/ RING	+.000 - .005	+.000 - .005											
	7/ Z/	+ .0000 - .0005	+ .0000 - .0005	1/ RING	1/ RING										
-3A	.1900	.6250	.245	.203	.253	.005	.016	550	100	550	480	.023	.01	1	4
-4A	.2500	.7500	.281	.219	.321			900	900	770	.025	1		6	
-5A	.3125	.8125	.297	.234	.381	.015	.016	1000	200	950	815	.028	.02	2	10
-6A	.3750	.8750	.313	.250	.453	.016		1120		1120	990	.030		3	8
-3	.1900	.7774	.297	.270	.290	.005	.022	900	300	900	770	.023	.03	1	6
-4	.2500	.9014	.484	.335	.390			1410		1230	1230	.025	.04	1	5
-5	.3125	1.2500	.558	.375	.561	.015	.032	2190	400	2190	1890	.028	.10	2	16
-6	.3750	1.4375	.620	.469	.607			2980		2980	2580	.030	.15	3	18
-8	.5000	1.6875	.620	.500	.791	.015	.044	3670	500	3670	3290	.032	.23	4	20
-10	.6250	1.9375	.813	.625	.916			5320		600	4980	4360	.034	.37	6

1/ DIMENSIONS TO BE MET AFTER PLATING.

2/ OUT-OF-ROUND TOLERANCES: BORE: +.0002, -.0007; OUTER DIA: +.0005, -.0010.

3/ 45° CHAMFER OR A RADIUS GIVING APPROXIMATELY THE SAME GRIP FOR STAKING THE BEARING IN THE HOUSING WILL BE ACCEPTABLE.

4/ 45° CHAMFER OR A RADIUS GIVING APPROXIMATELY THE SAME FILLET CLEARANCE WILL BE ACCEPTABLE.

5/ CASE I - LOAD FIXED WITH RESPECT TO OUTER RING.

CASE II - LOAD FIXED WITH RESPECT TO INNER RING.

6/ THESE RATINGS ARE FOR OPERATION UP TO 250°F. FOR OPERATION UP TO 350°F, THE RATINGS SHALL BE REDUCED BY 20%.

7/ THESE BEARINGS ARE INTERNAL SELF-ALIGNING FOR 10° IN EITHER DIRECTION EXCEPT MS-4A, -5A, AND -6A WHICH ARE SELF-ALIGNING FOR 8° IN EITHER DIRECTION.

(D) DENOTES CHANGES